

02/20/02
JC966 U.S. PTO

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EL919311211US

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Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

- Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
- Applicant claims small entity status.
See 37 CFR 1.27.
- Specification [Total Pages 8]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- Drawing(s) (35 U.S.C. 113) [Total Sheets 2]
- Oath or Declaration [Total Pages 3]
 - Newly executed (original or copy)
 - Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)
 - i. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- Application Data Sheet. See 37 CFR 1.76

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

Continuation Divisional Continuation-in-part (CIP) of prior application No. _____

Prior application information: Examiner _____ Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

<input type="checkbox"/> Customer Number or Bar Code Label	24-1234 <i>Printed Name of Person to whom correspondence should be addressed</i>		or	<input type="checkbox"/> Correspondence address below
Name				
Address				
City	State		Zip Code	
Country	Telephone	Fax		

Name (Print/Type)	Patricia M. Mathers	Registration No. (Attorney/Agent)	44,906
Signature	<i>Patricia M. Mathers</i>	Date	FEB. 20, 2002

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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PTO/SB/17 (09-00)

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 370.00)

Complete if Known

Application Number	
Filing Date	
First Named Inventor	Dieter GIRLICH
Examiner Name	
Group Art Unit	
Attorney Docket No.	02-013

METHOD OF PAYMENT

1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
Deposit Account Number 501 517
Deposit Account Name BOHAN, MATHERS & ASSOCIATES
<input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
<input checked="" type="checkbox"/> Applicant claims small entity status See 37 CFR 1.27
2. <input checked="" type="checkbox"/> Payment Enclosed: <input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)	Fee Description	
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for ex parte reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 390	216 195	Extension for reply within second month	
117 890	217 445	Extension for reply within third month	
118 1,390	218 695	Extension for reply within fourth month	
128 1,890	228 945	Extension for reply within fifth month	
119 310	219 155	Notice of Appeal	
120 310	220 155	Filing a brief in support of an appeal	
121 270	221 135	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,240	241 620	Petition to revive - unintentional	
142 1,240	242 620	Utility issue fee (or reissue)	
143 440	243 220	Design issue fee	
144 600	244 300	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Petitions related to provisional applications	
126 240	126 240	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	
146 710	246 355	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 710	249 355	For each additional invention to be examined (37 CFR § 1.129(b))	
179 710	279 355	Request for Continued Examination (RCE)	
169 900	169 900	Request for expedited examination of a design application	

Other fee (specify) _____

*or number previously paid, if greater; For Reissues, see above

Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

Complete (if applicable)

Name (Print/Type)	Patricia M. Mathers,	Registration No. (Attorney/Agent)	44,906	Telephone	(207) 773-3132
Signature	Patricia M. Mathers		Date	1/26/2002	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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I, Patricia M. Mathers, hereby state that I am fluent in the English and German languages and that I have reviewed the attached literal translation of the German patent application DE 199 39 155.6 with the German title "Verfahren und Vorrichtung zur Herstellung von Gitternetzstrukturen". I hereby attest that the attached translation is a true and literal translation of the German application.

February 19, 2002

Patricia M. Mathers

Patricia M. Mathers

Bohan, Mathers & Associates
371 Fore Street, Suite 202
Portland, Maine 04101

J1017 U S. PTO
10/07/9331
02/20/02



I, Patricia M. Mathers, hereby state that I am fluent in the English and German languages and that I have reviewed the attached Annex (Beiblatt) to the International Preliminary Examination Report of the International Application PCT/DE00/02597 with the German title "Verfahren und Vorrichtung zur Herstellung von Gitternetzstrukturen". I hereby attest that the translation of the Annex is a true and literal translation of the German Beiblatt.

February 19, 2002

Patricia M. Mathers

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Bohan, Mathers & Associates
371 Fore Street, Suite 202
Portland, Maine 04101

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02/20/02


1. The closest prior art cited in the application, D1 US-A-3616841, particularly columns 2, 3, comprises, in addition to other steps, the following steps:
 - (1) Placing a polyurethane pre-structure in a casting box with open bottom ("casting flask");
 - (2) Infiltrating the foam pre-structure with a gypsum material;
 - (3) Setting the gypsum material;
 - (5) Removing the foam pre-structure by volatilizing the polyurethane at a temperature between 540 and 820°C, whereby the workpiece remains in the casting box;
 - (7) Infiltrating the still-warm gypsum foam-pre-structure with molten metal;
 - (8) After solidification of the metal, withdrawing the formed gypsum-metal-body from the casting box and removing the gypsum material.

The method according to Claim 1 is distinguishable from D1 in that the workpiece is withdrawn from the casting box , or the "openable container", **before** step (5) and placed in a "second, heat-resistant container" **after** step (5), that is, the method is distinguishable through the presence of the additional steps (4) and (6).

Novelty of the Claims 1 - 6 directed to the method is thus given. The additional steps (4) and (6) enable delay-free heating of the foam pre-structure and its rapid volatilization. Since none of the available documents teach or motivate this task or the means used in resolving the task, that is, do not teach or motivate one to apply steps (4) and (6), an inventive step is present.

Claim 7, directed to a device, claims only a "refractory container with a pour opening". The casting box of D1 can also be considered to be such a container. The dimensions of the inner space being "greater than that of the refractory pre-heated body" cannot distinguish the device from the prior art. Thus, the subject matter of Claim 7 is lacking in novelty as well as an inventive step.

2. The description has not been adapted to the changed claims (lacking support and therefore lack of clarity of the claims, Art. 6 PCT).

This also applies to the objective recited in the application, page 2, middle paragraph, which appears to have already been solved in D1.